Express5800/R120a-2

RACK SERVER

About NEC Express5800/R120a-2

The NEC Express5800/R120a-2 is an innovative two-socket server based on an energy efficient design and the Intel Xeon 5500 Series. The R120a-2 rack server is one of the first servers to benefit from the performance boost from Intel latest chip technology. The R120a-2 also benefits from NEC's innovative energy efficiency and additional space for storage and PCI expansion in its 2U format. The NEC server is designed for application compatibility and high availability in a wide choice of configurations. With very high quality ratings the NEC R120a-2 server can outlast other servers, delivering the best overall total cost of ownership and excellent value.

Key Benefits:
• High Performance
• Leverages newest Intel processors
• Higher throughput performance
• Performance optimized for virtualized environments
• Peak performance efficiency for standard & clustered applications, databases, and hypervisor platforms
• Energy Efficiency
• NEC's Green Cooling Technology minimizes power consumption
• Dynamic fan control regulates server temperature based on workload and configuration
• Power supply is 80 PLUS certified energy efficient to save more energy.
• Quality and Value
• NEC delivers high quality servers optimizing latest Intel technology
• Servers designed to run at maximum performance over the life of its service
• Long warranty program for excellent value
• Minimal total cost of ownership

Overview:

The NEC Express5800/R120a-2 features enhanced memory performance, including Intel's Quick Path Interconnect (QPI) technology to increase performance with DDR3-1066 memory support for faster access. Inclusion of PCI EXPRESS 2.0 with high speed bandwidth offers twice the capacity as previous technology.

Power capping technology packs more servers into a smaller space, while utilization of 2.5" HDDs affords lower power consumption.

For more efficient management, NEC Includes server utilities for centralized administration, with easy-to-use EXPRESSBUILDER software for configuration and operating system installation utilities. Remote management capability is included through NEC's EXPRESSSCOPE management solution.

Product Specifications

Express5800/R120a-2

Processor	1 or 2 Intel® Xeon® Processor 5500 series
Model # (frequency, core)	X5570(2.93G/4Core), X5550(2.66G/4Core), E5520(2.26G/4Core), E5504(2G/4Core), X5504 (2G/4Core), E5502(1.86G/2Core)
Interface	QPI (19.2GB/s-25.6GB/s @ per QPI)
Chipset	Intel® 5520 Chipset
Memory	12x DDR3-1066 Registered DIMM (Standard 2GB, Max. 96GB)
Hard Disk Storage Type Bays RAID	 SAS HDD 6(3.5" HDD, Hot-Swap) or 8(2.5" HDD, Hot-Swap) 2.5" & 3.5" HDD: SAS/SATA2 RAID 0/1 (Standard), RAID 5/6 (Optional)
Internal Device Bay	1x Slim DVD-ROM (Standard), 1x Slim FDD (Optional, only with 3.5" model)
Expansion Slots & Cards	5 slots • Full height riser (Select 1) • 1x PCIe 2.0 (x16) 1x PCIe 2.0 (x8)) (Standard) • 1x 64bit/133MHz PCI-X + 1x PCIe 2.0 (x8) (Optional) • 2x 64bit/33MHz PCI [5V] (Optional, assisted separately) Low Profile • 1x PCIe 2.0 (x8) + 2x PCIe 2.0 (x4)
Interface	• Front: 1x RGB, 2x USB 2.0 • Back: 1x RGB, 2x PS/2, 1x Serial port, 2x USB 2.0 • 3x LAN (1 for Management)
Server Management	NEC EXPRESSSCOPE®Engine 2
Video Memory	Max. resolution: 1,280 x 1,024 / 16,770,000 colors (VRAM: 32MB)
Network	2x 1000BASE-T + 1x 100BASE-TX (Management Port)
Power	Redundant power with Hot-plug support(Optional, 80 PLUS®)
Dimensions (WxDxH)	445 x 722 x 88 mm (chassis, excluding front bezel)
Supported OS	• Microsoft® Windows Server™ 2003 R2 and 2008 Standard / Enterprise Edition (32-bit) • Microsoft Windows Server 2003 R2 and 2008 Standard / Enterprise Edition (64-bit) • Red Hat Enterprise Linux 5[1] • VMware® VI3 ESX v3.5 Foundation Edition • VMware VI3 ESX v3.5 Standard Edition • VMware VI3 ESX v3.5 Enterprise Edition

[1] On-board disk array is not supported by Linux.

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Express5800

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